

\*\*\*\*\* STN Columbus \*\*\*\*\*

09/936, 146

FILE 'HOME' ENTERED AT 09:11:29 ON 13 JUL 2005

=> file biosis medline caplus wpids uspatfull  
COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE	TOTAL
ENTRY	SESSION
3.36	3.36

FILE 'BIOSIS' ENTERED AT 09:21:06 ON 13 JUL 2005

Copyright (c) 2005 The Thomson Corporation

FILE 'MEDLINE' ENTERED AT 09:21:06 ON 13 JUL 2005

FILE 'CAPLUS' ENTERED AT 09:21:06 ON 13 JUL 2005

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'WPIDS' ENTERED AT 09:21:06 ON 13 JUL 2005

COPYRIGHT (C) 2005 THE THOMSON CORPORATION

FILE 'USPATFULL' ENTERED AT 09:21:06 ON 13 JUL 2005

CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

\*\*\* YOU HAVE NEW MAIL \*\*\*

=> s inhibit?(3a) self splic?

L1 121 INHIBIT?(3A) SELF SPLIC?

=> s l1 and Group I intron

L2 68 L1 AND GROUP I INTRON

=> s l2 and precursor (3a) RNA

L3 7 L2 AND PRECURSOR (3A) RNA

=> s l3 and exon

L4 4 L3 AND EXON

=> d l4 bib abs 1-4

L4 ANSWER 1 OF 4 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN

AN 2000-638210 [61] WPIDS

DNC C2000-191938

TI **Group-I intron self-**

**splicing** reaction **inhibitor** for treating diseases caused  
by pathogenic fungi, has oligonucleotide having sequence that binds to 5'  
internal guide sequence of **precursor RNA** containing  
intron.

DC B04 D16

IN DISNEY, M D; GRYAZNOV, S M; TESTA, S M; TURNER, D H

PA (GERO-N) GERON CORP; (UYRP) UNIV ROCHESTER

CYC 91

PI WO 2000055374 A1 20000921 (200061)\* EN 37

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL  
OA PT SD SE SL SZ TZ UG ZW

W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE  
ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR  
LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK  
SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

AU 2000038927 A 20001004 (200101)

ADT WO 2000055374 A1 WO 2000-US7045 20000315; AU 2000038927 A AU 2000-38927  
20000315

FDT AU 2000038927 A Based on WO 2000055374

PRAI US 1999-124451P 19990315

AN 2000-638210 [61] WPIDS

AB WO 200055374 A UPAB: 20011129

NOVELTY - An inhibitor (I) of a **Group-I intron**

(IN) self-splicing reaction comprises an oligonucleotide (ON) having a polynucleotide sequence that binds to a 5' internal guide sequence (IGS) of a **precursor RNA** containing a (IN), or to a portion. (ON) is capable of binding with the IGS and of being trans-spliced to the 3' **exon** of the **precursor RNA**.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) a composition comprising (I) and a carrier; and
- (2) designing (I) comprising choosing a nucleotide sequence that binds to IGS present in **precursor RNA** containing (IN), or to a portion, and preparing an (ON) having the chosen sequence.

ACTIVITY - Fungicide.

MECHANISM OF ACTION - **Inhibitor** of (IN) **self-splicing** reaction. *Pneumocystis carinii* splicing reactions were conducted by reannealing about 180 nM of internally radiolabeled **precursor RNA** at 55 deg. C in a buffer containing MgCl<sub>2</sub> and slow cooling to 37 deg. C. A 3 micro l solution of buffer containing either 2 mM pG and/or 60 micro M (dA)n(dT)n(dG)n(dA)n(dC)n(rU) or neither was added and allowed to react for 1 hour at 37 deg. C. To check sequence specificity, the self-splicing reaction was conducted with the control oligonucleotide (dC)n(dA)n(dG)n(dT)n(dA)n(rU) as above under conditions that maximized production of the 5' **exon**-intron band with (dA)n(dT)n(dG)n(dA)n(dC)n(rU). The results showed that in the absence of pG and (dA)n(dT)n(dG)n(dA)n(dC)n(rU) the hydrolytic production of the 5' **exon**-intron band at 2mM Mg<sup>2+</sup> was about 10 times less than in the presence of (dA)n(dT)n(dG)n(dA)n(dC)n(rU).

USE - (I) is useful for **inhibiting self-splicing** of (IN) by contacting a **precursor RNA** containing (IN) with an (ON) which trans-splices to a 3' **exon** sequence of **precursor RNA**. (I) is useful for inhibiting the growth of an organism transcribing a **precursor RNA** containing (IN) by contacting the organism with (ON) for growth inhibition (claimed). (I) is useful for treating a disease or condition caused by organisms such as *Pneumocystis carinii*, *Candida albicans* and *Aspergillus nidulans* containing (IN).

DESCRIPTION OF DRAWING(S) - The figure shows a schematic representation of the self-splicing (cis-splicing) and trans-splicing reactions of a **Group I intron**.

Dwg.1/7

L4 ANSWER 2 OF 4 USPTAFULL on STN  
AN 2004:39569 USPTAFULL  
TI Oligonucleotide directed misfolding of RNA  
IN Turner, Douglas H., Pittsford, NY, UNITED STATES  
Childs, Jessica L., Zurich, SWITZERLAND  
Disney, Matthew D., Zurich, SWITZERLAND  
PI US 2004030111 A1 20040212  
AI US 2003-465730 A1 20030619 (10)  
PRAI US 2002-390241P 20020619 (60)  
DT Utility  
FS APPLICATION  
LREP Edwin V. Merkel, NIXON PEABODY LLP, Clinton Square, P.O. Box 31051,  
Rochester, NY, 14603-1051  
CLMN Number of Claims: 85  
ECL Exemplary Claim: 1  
DRWN 10 Drawing Page(s)  
LN.CNT 2086  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB Oligonucleotides that bind to and cause misfolding of functional RNA molecules are described. Also disclosed are the uses of the oligonucleotides to modify the function of such RNA molecules, to stabilize the RNA molecules in a misfolded conformation, to disrupt survivability of a pathogen or cancer cells (that require activity of the RNA molecule for survival) by disrupting the activity of the RNA molecules, treating or preventing pathogen infection in a patient, and treating a cancerous condition in a patient. Methods of designing the oligonucleotides of the present invention are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 3 OF 4 USPATFULL on STN  
AN 2003:57549 USPATFULL  
TI SMALL MOLECULE MODULATION OF RIBOZYMES  
IN CUI, MEI, ANN ARBOR, MI, UNITED STATES  
CZARNIK, ANTHONY WILLIAM, SAN DIEGO, CA, UNITED STATES  
MEI, HOUNG-YAU, ANN ARBOR, MI, UNITED STATES  
PA Warner-Lambert Company,, Marris Plains, NJ (U.S. corporation)  
PI US 2003040114 A1 20030227  
AI US 1999-326956 A1 19990607 (9)  
RLI Continuation of Ser. No. US 1997-923487, filed on 4 Sep 1997, ABANDONED  
PRAI US 1996-24685P 19960905 (60)  
DT Utility  
FS APPLICATION  
LREP MERCHANT & GOULD PC, P.O. BOX 2903, MINNEAPOLIS, MN, 55402-0903  
CLMN Number of Claims: 29  
ECL Exemplary Claim: 1  
DRWN 12 Drawing Page(s)  
LN.CNT 719

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method for selecting a compound that modulates the activity of a ribozyme in vivo in an organism comprising: (a) measuring in an assay the ability of a compound to selectively bind to a ribozyme thereby inhibiting the function of said ribozyme; and (b) selecting the assayed compound for use in modulating the activity of said ribozyme in vivo in an organism as a pharmaceutical agent as well as a method for selecting a compound for diagnosing the presence of a ribozyme in an organism that is pathogenic to an animal or plant.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 4 OF 4 USPATFULL on STN  
AN 1998:157102 USPATFULL  
TI In vitro assay for **inhibitors** of the intron **self-splicing** reaction in *Pneumocystis carinii*  
IN Leibowitz, Michael J., Manalpan, NJ, United States  
Liu, Yong, Piscataway, NJ, United States  
PA University of Medicine & Dentistry of NJ, Piscataway, NJ, United States (U.S. corporation)  
PI US 5849484 19981215  
AI US 1995-491690 19950619 (8)  
RLI Continuation of Ser. No. US 1993-68248, filed on 27 May 1993, now abandoned which is a continuation-in-part of Ser. No. US 1992-922987, filed on 30 Jul 1992, now abandoned  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Myers, Carla J.  
LREP Muccino, Richard R  
CLMN Number of Claims: 18  
ECL Exemplary Claim: 1  
DRWN 27 Drawing Figure(s); 27 Drawing Page(s)  
LN.CNT 1906

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention pertains to an in vitro method for assaying for an inhibitor of the catalytic Group I self-splicing intron reaction in the nuclear rRNA genes of *Pneumocystis carinii* which comprises the steps of (a) providing a DNA template containing the intron (I) from the 26S rRNA gene in *Pneumocystis carinii* and a portion of the 5' and 3' flanking exons (E1 and E2, respectively) between nucleotides 1963 and 2267 of 26S rRNA (660 nucleotides of amplified rRNA gene including the **group I intron**); (b) preparing an **RNA precursor** by transcription of the DNA template in the presence of labeled nucleoside triphosphates to produce a labeled **RNA precursor** (E1-I-E2); (c) purifying the **RNA precursor**; (d) incubating the **RNA precursor** and the inhibitor in the presence of guanosine triphosphate and magnesium ions; and (e) determining the degree of inhibition by the

inhibitor on the intron splicing reaction in the **RNA precursor** by measuring the amount of labeled splicing intermediates and splicing products.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=>

=> s oligonucleotide? (5a) trans (3a) splic?  
L6 . 25 OLIGONUCLEOTIDE? (5A) TRANS (3A) SPLIC?

=> s 16 and precursor RNA  
L7 1 L6 AND PRECURSOR RNA

=> d 17 bib abs

L7 ANSWER 1 OF 1 USPATFULL on STN  
AN 2000:157195 USPATFULL  
TI Intron-mediated recombinant techniques and reagents  
IN Jarrell, Kevin A., Lincoln, MA, United States  
PA Trustees of Boston University, Boston, MA, United States (U.S. corporation)  
PI US 6150141 20001121  
AI US 1997-814412 19970311 (8)  
RLI Continuation-in-part of Ser. No. US 1995-488015, filed on 7 Jun 1995, now patented, Pat. No. US 5780272 which is a continuation-in-part of Ser. No. US 1993-119512, filed on 10 Sep 1993, now patented, Pat. No. US 5498531  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Degen, Nancy  
LREP Choate, Hall & Stewart, Pasternack, Sam, Jarrell, Brenda Herschbach  
CLMN Number of Claims: 19  
ECL Exemplary Claim: 1  
DRWN 76 Drawing Figure(s); 64 Drawing Page(s)  
LN.CNT 5034

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention makes available methods and reagents for novel manipulation of nucleic acids. As described herein, the present invention makes use of the ability of intronic sequences, such as derived from group I, group II, or nuclear pre-mRNA introns, to mediate specific cleavage and ligation of discontinuous nucleic acid molecules. For example, novel genes and gene products can be generated by admixing nucleic acid constructs which comprise exon nucleic acid sequences flanked by intron sequences that can direct trans-splicing of the exon sequences to each other. The flanking intronic sequences can, by intermolecular complementation, form a reactive complex which promotes the transesterification reactions necessary to cause the ligation of discontinuous nucleic acid sequences to one another, and thereby generate a recombinant gene comprising the ligated exons.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

**THIS PAGE LEFT BLANK**

**THIS PAGE LEFT BLANK**